
CAAction Protocol Reference

Graphics & Animation: Animation



2007-07-24



Apple Inc.
© 2007 Apple Inc.
All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, mechanical, electronic, photocopying, recording, or otherwise, without prior written permission of Apple Inc., with the following exceptions: Any person is hereby authorized to store documentation on a single computer for personal use only and to print copies of documentation for personal use provided that the documentation contains Apple's copyright notice.

The Apple logo is a trademark of Apple Inc.

Use of the "keyboard" Apple logo (Option-Shift-K) for commercial purposes without the prior written consent of Apple may constitute trademark infringement and unfair competition in violation of federal and state laws.

No licenses, express or implied, are granted with respect to any of the technology described in this document. Apple retains all intellectual property rights associated with the technology described in this document. This document is intended to assist application developers to develop applications only for Apple-labeled computers.

Every effort has been made to ensure that the information in this document is accurate. Apple is not responsible for typographical errors.

Apple Inc.
1 Infinite Loop
Cupertino, CA 95014
408-996-1010

Apple, the Apple logo, iPhone, and Quartz are trademarks of Apple Inc., registered in the United States and other countries.

iOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.

Simultaneously published in the United States and Canada.

Even though Apple has reviewed this document, APPLE MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS DOCUMENT, ITS QUALITY, ACCURACY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. AS A RESULT, THIS DOCUMENT IS PROVIDED "AS IS," AND YOU, THE READER, ARE ASSUMING THE ENTIRE RISK AS TO ITS QUALITY AND ACCURACY.

IN NO EVENT WILL APPLE BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT OR INACCURACY IN THIS DOCUMENT, even if advised of the possibility of such damages.

THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED. No Apple dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Contents

CAAction Protocol Reference 5

Overview 5

Tasks 5

 Responding to an Action 5

Instance Methods 5

 runActionForKey:object:arguments: 5

Document Revision History 7

CAAction Protocol Reference

Adopted by	CAAnimation
Framework	/System/Library/Frameworks/QuartzCore.framework
Availability	Available in iOS 2.0 and later.
Declared in	CALayer.h
Companion guides	Core Animation Programming Guide Core Animation Cookbook

Overview

The `CAAction` protocol provides an interface that allows an object to respond to an action triggered by an `CALayer`. When queried with an action identifier (a key path, an external action name, or a predefined action identifier) the layer returns the appropriate action object—which must implement the `CAAction` protocol—and sends it a `runActionForKey:object:arguments:` (page 5) message.

Tasks

Responding to an Action

- `runActionForKey:object:arguments:` (page 5) *required method*
Called to trigger the action specified by the identifier. (required)

Instance Methods

`runActionForKey:object:arguments:`

Called to trigger the action specified by the identifier. (required)

- `(void)runActionForKey:(NSString *)key
object:(id)anObject
arguments:(NSDictionary *)dict`

Parameters

key

The identifier of the action. The identifier may be a key or key path relative to *anObject*, an arbitrary external action, or one of the action identifiers defined in *CALayer Class Reference*.

anObject

The layer on which the action should occur.

dict

A dictionary containing parameters associated with this event. May be *nil*.

Availability

Available in iOS 2.0 and later.

Declared In

`CALayer.h`

Document Revision History

This table describes the changes to *CAAction Protocol Reference*.

Date	Notes
2007-07-24	New document that describes the protocol used by objects to respond to actions initiated by a layer.

REVISION HISTORY

Document Revision History